The opinion in support of the decision being entered today was <u>not</u> written for publication and is <u>not</u> binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte RAKESH AGRAWAL and RAMAKRISHNAN SRIKANT

Appeal No. 2004-2099 Application No. 09/487,191

ON BRIEF

MAILED

SEP 2 7 2004

PAT. & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before HAIRSTON, BARRY, and MACDONALD, Administrative Patent Judges.

MACDONALD, Administrative Patent Judge.

## DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-13 and 20-23. Claims 14-19 have been canceled.

#### Invention

Appellants' invention relates to a method and system for obtaining data from at least one user via the Internet. Original data is input by the user. The original data is perturbed to create perturbed data. The perturbed data is sent from the user's computer to a server computer. The server computer performs analysis on the perturbed data without ever seeing the

original data. The server computer estimates the distribution of the original data based on the distribution of the perturbed data and generates a data-mining model from the estimate. Also, the server computer generates at least one classification model using the perturbed data. See Appellants' specification at pages 3 and 7.

Claims 1 and 7 are representative of the claimed invention and are reproduced as follows:

1. A computer-implemented method for obtaining data from at least one user computer via the Internet while maintaining the privacy of a user of the computer, comprising the acts of:

perturbing original data associated with the user computer to render perturbed data;

using a distribution of the perturbed data, generating at least one estimate of a distribution of the original data; and

using the estimate of the distribution of the original data, generating at least one data mining model.

7. A computer system including a program of instructions including structure to undertake method acts comprising:

at a user computer, randomizing at least some original values of at least some numeric attributes to render perturbed values;

sending the perturbed values to a server computer not having access to the original values;

and

at the server computer, processing the perturbed values to generate at least one classification model.

#### References

The references relied on by the Examiner are as follows:

Fayyad et al. (Fayyad) 6,115,708 Sep. 5, 2000

(filed Mar. 4, 1998)

"A Modified Random Perturbation Method for Database Security;" Tendick and Matloff (Tendick); ACM Trans. on Database Systems, Vol. 19, No. 1, March 1994, Pages 47-63.

## Rejections At Issue

Claims 1-13 and 20-23 stand rejected under 35 U.S.C. § 103 as being obvious over the combination of Fayyad and Tendick.

Throughout our opinion, we make references to the Appellants' briefs, and to the Examiner's Answer for the respective details thereof.<sup>1</sup>

## **OPINION**

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated *infra*, we reverse the Examiner's rejection of claims 1-6 and 20-22 under 35 U.S.C. § 103; and we affirm the Examiner's rejection of claims 7-13 and 23 under 35 U.S.C. § 103.

Appellants have indicated that for purposes of this appeal all the claims stand or fall together in a single group. See

<sup>&#</sup>x27;Appellants filed an appeal brief on August 15, 2002. Appellants filed a reply brief on December 3, 2002. The Examiner mailed an Examiner's Answer on November 6, 2002.

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page 3 of the brief. We do not concur with this grouping.

Appellants' arguments are applicable only to independent claim 1 and not to independent claims 7 and 13, as these claims do not contain the argued limitation. See pages 3-6 of the brief and pages 1-2 of the reply brief.

We will, for purposes of this appeal, treat the claims as standing or falling together in two groupings:

Claims 1-6 and 20-22 as Group I; and

Claims 7-13 and 23 as Group II.

37 CFR § 1.192 (c)(7) (July 1, 2002) as amended at 62 Fed. Reg. 53169 (October 10, 1997) was controlling at the time of Appellants' filing of the brief. 37 CFR § 1.192 (c)(7) states:

Grouping of claims. For each ground of rejection which appellants contest and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c)(8) of this section, appellants explain why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.

We will, thereby, consider Appellants' claims as standing or falling together in the two groups noted above, and we will treat:

Claim 1 as a representative claim of Group I; and
Claim 7 as a representative claim of Group II.

If the brief fails to meet either requirement, the Board is free
to select a single claim from each group and to decide the appeal
of that rejection based solely on the selected representative
claim. In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465
(Fed. Cir. 2002). See also In re Watts, 354 F.3d 1362, 1368,
69 USPQ2d 1453, 1457 (Fed. Cir. 2004).

# I. Whether the Rejection of Claims 1-6 and 20-22 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would <u>not</u> have suggested to one of ordinary skill in the art the invention as set forth in claims 1-6 and 20-22. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can

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satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. In re

Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants.

Oetiker, 977 F.2d at 1445, 24 USPQ2d at 1444. See also Piasecki, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." *In re Lee*, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

With respect to independent claim 1, Appellants argue, "a single value representing a mean of many values is a different mathematical concept than the actual distribution of the values themselves" (brief at page 4), "no prior art showing of a perturbation of a distribution of values has been shown" (brief

at page 5), "Claim 1 recites using a distribution of perturbed data to generate an estimate of a distribution of the original data" (brief at page 5), "there has been no teaching cited for perturbing a distribution of values" (brief at page 6), and "[n]o distribution of perturbed data is ever mentioned or suggested" (reply brief at page 1).

After reviewing the Examiner's rebuttal at pages 8-10 of the answer, we find Appellants' arguments persuasive. Although the Tendick reference teaches using data perturbation to protect privacy (see the last paragraph of page 48), we find that neither the Fayyad patent, the Tendick reference, nor their combination teaches "using a distribution of the perturbed data, generating at least one estimate of a distribution of the original data."

Therefore, we will <u>not</u> sustain the Examiner's rejection under 35 U.S.C. § 103.

# II. Whether the Rejection of Claims 7-13 and 23 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claims 7-13 and 23.

Accordingly, we affirm.

Appellants have thoroughly argued the limitation of "generating at least one estimate of a distribution of the original data using a distribution of the perturbed data." However, this limitation is not found in claim 7.

With respect to independent claim 7, Appellants have not presented arguments pointing out alleged error(s) in the Examiner's rejection of claim 1 that are also applicable to claim 7. Further, Appellants have not presented separate arguments pointing out any alleged error in the Examiner's rejection of claim 7.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103.

#### Conclusion

In view of the foregoing discussion, we have <u>not</u> sustained the rejection under 35 U.S.C. § 103 of claims 1-6 and 20-22; and we have sustained the rejection under 35 U.S.C. § 103 of claims 7-13 and 23.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

### AFFIRMED-IN-PART

KENNETH W. HAIRSTON Administrative Patent Judge

TANCE LEONARD BARRY
Administrative Patent Judge

BOARD OF PATENT

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